

What Galileo Said

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Certainly there are unchanging truths,
but there are changing truths also,
and it is a pity if logic ignores these.
(Arthur Prior)

Abstract

Davidson's paratactic account of indirect speech has it that a natural-language report of an utterance such as Galileo's supposed one of 'The Earth moves' should be understood as analyzable into two separate, and semantically independent, utterances, the first of which points to the second, with the latter meaning in the reporter's mouth what Galileo's meant in his. The account rests on the assumption—shared by most writers on the subject, including critics of the account—that the correct natural-language report of Galileo's utterance is 'Galileo said that the Earth moves.' I show that on that assumption the paratactic analysis misfires: the two utterances—Galileo's and the reporter's—do not samesay one another. However, this is also the case if the verb in the demonstrated sentence is changed to respect the tense-sequencing rule as does 'Galileo said that the Earth moved.' Since the latter does correctly report Galileo, that must be because, contrary to the central claim of the paratactic analysis, its two clauses are not semantically independent.

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That there are difficulties in accounting for binding of various sorts across clauses in indirect discourse is has been known for a long time (Higginbotham 1986: *inter alia*). Some of these have been thought to present problems for the paratactic account, given its central thesis that a report of the form '*S* said that *p*' is, contrary to appearance, not really an utterance of a single sentence but of two separate and semantically independent sentences, the utterance of the first by the reporter asserting that *x* said what the utterance of the second by the reporter says. For the report to be true, the reporter's second utterance must "samesay"—that is, have the same content as—*S*'s utterance. Yet while two sentences contain-

ing different but co-referring expressions—names, pronouns, definite descriptions—can express the same proposition, they are not substitutable *salva veritate* in indirect reports (any more than in other opaque contexts). Which of these should we choose as the vehicle for specifying the content of *S*'s utterance?

Here I shall not be concerned with the so-called paratactic gap that opens up as a result nor with attempts to bridge it (e.g., Blair). Instead, I shall adduce some reasons for thinking that there is another kind of gap, having to do with tense, that cannot be closed.

In summarizing the paratactic account, Burge notes in passing that it requires ignoring tense (1986: 192). This, I shall show, results in mis-reporting the speaker. To get our report right we have to take tense into account, and we can do so through the machinery of tense sequencing. However, a paratactic report is unable to accommodate tense in that way. This stands in the way of securing the samesaying relation central to the account.

Suppose Galileo to have uttered

(1) The Earth moves.¹

It is assumed by Davidson that the proper natural-language report of what he said is

(2) Galileo said that the Earth moves.²

Davidson's so-called paratactic analysis of (2) is as two separate and semantically unrelated sentences, as in

(3) Galileo said that. The Earth moves.

In (3), 'that' is to be seen as a demonstrative, pointing to an utterance of its second sentence.³ What Galileo is said to have said is what the reporter would be saying were he to utter that sentence: the two speakers (or the two utterances) are said to *samesay* each other. For this to be the case, it is not necessary that the utterances they respectively make be of synonymous sentences. Samesaying is a relation not between sentences but utterances. As Davidson—somewhat misleadingly—puts it, because "Galileo uttered a sentence that meant in his mouth what 'The earth moves' means now in mine" (1968: 140). Two utterances of sentences with different meanings can samesay each other, as with my utterance

¹ What he is supposed in legend to have uttered is, of course, not that sentence but 'Eppur si muove.' But we can go along with Davidson in pretending.^[1] However, 'The Earth' is a proper name, the capital 'T' being part of it. Davidson's (and others') 'the Earth' is a mutation. (True, these days the definite article is sometimes dropped, bringing our planet's name in line with fellow planets. We do not say: 'The Saturn.' But then it should be dropped from the content clause of the paratactic report, as well.)

² That this is the proper report usually goes unquestioned. McDowell, Higginbotham, Larson and Ludlow and Ludwig and Ray all assume it. The last-named list nine difficulties for the paratactic account that they claim their rival (though still, in spirit, Davidsonian) account solves. The problem I shall suggest arises from accepting (2) as the proper natural-language report and fashioning a paratactic version based on it is not among them.

³ For present purposes, I shall grant Davidson's claim that 'that' in (2) is a demonstrative pronoun. Misgivings about that claim may be found in Segal and Speas 1986, Segal 1989, and Biro 2011. But, as Blair argues, some version of the paratactic account may work even if Davidson is wrong about this.

of 'I am tired' and yours of 'He is tired' or with an utterance of 'We visited the capital of Italy' and one of 'We visited the Eternal City'.⁴

Suppose, then, Galileo to have uttered a token of the sentence 'Eppur si muove.' As Higginbotham (who also accepts (2) as a correct report) points out, Italian unlike English "permit[s] a simple present-tense, non-progressive sentence to be a report on the current scene" (1999: 213). Let us take Galileo to have intended, as we know he did not, such a report, wanting to say (only) that the Earth was moving at the time of his utterance. What would be the correct paratactic report of what he said? It cannot be

(4) Galileo said that. The Earth is moving.

for the second sentence of (4) in my mouth means that the Earth is moving at the time of my utterance. While Galileo may well have believed that this would be the case, his uttering what he did is not sufficient for reporting him as saying that it would be. One may say that the Earth is moving without believing that it would be doing so at some time later. Nor can it be

(5) Galileo said that. The Earth was moving.

for he did not utter anything that in his mouth meant what its second sentence means in mine. And if he had, he would have been saying that the Earth had been moving at a time earlier than his utterance and implying that it was no longer doing so.⁵

Higginbotham maintains that 'Mary said that a unicorn was walking' may be a report of an utterance by Mary of either 'A unicorn is walking' or 'A unicorn was walking' (1999: 200). Not only is this hard to square with his official doctrine that sequence of tense is obligatory (2009: Ch. V), but it seems plainly wrong: had Mary uttered the latter sentence, we would surely report her as having said that a unicorn *had been walking*. Nor is this a slip: we find the same claim, that an indirect report whose content clause is in the simple past may be a correct report of an utterance itself in the simple past, in his 2009 (83-84), where he suggests that an utterance of 'Gianni said that Maria was ill' could be made true by Gianni's saying, sometime in the past, "something to the effect" that Maria was ill *at the time*. That something would be, presumably, his saying (uttering) 'Maria is ill.' Yet, according to Higginbotham, that same report can also "constitute a report of a past past-oriented utterance." This cannot be right: if Gianni had wanted to say something about Maria's health prior to his utterance, he would have uttered 'Maria was ill' and our report of what he said would have

⁴ Some authors seem to assume that samesaying requires synonymy (Elugardo 1999, Burge 1986). But see Davidson 1999. Davidson himself speaks of two utterances' having the same content as their "translating" one another (1976).

⁵ An utterance of (2) could also mean something quite different, as could that of 'Galileo said that the earth was moving': the former that the planet was on its way to a different place in the firmament, the latter that an earthquake was in progress. Translating Galileo's 'si muove' either as 'turns' or as 'revolves', rather than 'moves,' avoids these obviously irrelevant interpretations, making it clear that we mean either that the Earth spins around its axis or that it orbits the sun. (Many languages mark the difference between these lexically: German has 'dreht sich' and 'umkreist' for 'spins' and 'orbits,' respectively, and 'bewegt sich' for 'moves', Hungarian 'forog' (spins) and 'kering' (orbits)—and 'mozog' or '(meg)mozdul' for 'is moving' and 'moves,' respectively.)

to be ‘Gianni said that Maria had been ill.’ Gianni cannot say that Maria is ill at the time of his speaking by saying ‘Maria was ill,’ and he cannot be reported as having said this by ‘Gianni said that Maria was ill.’ In the same way, if we were to take (4) as saying that Galileo uttered what follows ‘that’ and (5) as saying that he uttered its second sentence, we would be representing him as having said that the Earth had moved but had come to rest prior to his speaking. Obviously, that would be getting him wrong, but what else can we take (4) and (5) to be saying?

Thus Davidson is wrong when he says: “Galileo utters his words ‘Eppur si muove,’ I utter my words, ‘The Earth moves.’ There is no problem yet in recognizing that we are samesayers; an utterance of mine matches an utterance of his in purport. I am not now using my words to refer to a sentence; I speak for myself, and my words refer in the usual way to The Earth and to its movement” (1968: 141).

If ‘moves’ in the second clause of (2) and in the second sentence of (3) cannot be interpreted as ‘is moving,’ can it be interpreted as being about the time of (2) and (3) are uttered, as the paratactic account requires? Perhaps we can make Galileo and me samesayers, after all, by understanding (2) and (3) as saying that we both said that the Earth moves *now*, where ‘now’ is indexed to the time of our respective utterances. However, the familiar distinction between meaning and reference (or, as some say, character and content) must be kept in mind here. While what the sentence Galileo and I both utter has but one meaning, ‘now’ (or ‘at the time of speaking’) has a different reference in our respective utterances of it. Given this, we assert different propositions by uttering the same sentence and are thus not *saying* the same thing in any recognizable sense. Thus if we take ‘si muove’ to mean either ‘is moving’ or ‘moves now,’ (3) cannot be an accurate report of what Galileo said. In different ways, both these interpretations make the report into one “on the current scene.”

In an everyday report that respects tense sequencing we have no difficulty in avoiding such misrepresentation.⁶ We say

(6) Galileo said that the Earth moved.

This cancels the unwanted implication, present in both (2) and (3), that when uttering what he did, Galileo was saying something about what the Earth would be doing in 2019. This is desirable, since while it is a reasonable assumption that he, and anyone else, uttering the sentence in 1633 would have been disposed to assert that it would be, the fact that he uttered what he did is not enough for us

⁶ The tense-sequencing rule for indirect discourse is (roughly speaking) that the tense of the verb in the content clause of an indirect must shift to the past perfect, the pluperfect, or the conditional, respectively, according to whether its tense in the original utterance is present, past, or future. Thus ‘It is raining’ goes to ‘He said that it was raining,’ ‘It was raining’ to ‘He said that it was raining,’ and ‘It will rain’ to ‘He said that it would rain.’ Not all languages have such a ‘backshifting’ or ‘attracted sequence’ rule. Speakers of languages that do not have to rely on context and collateral information to interpret a report such as (2). And it is sometimes thought that even in languages that do have such a rule, such as English, it admits of exceptions. I discuss the example Lepore and Ludwig offer (2003: 98-99) and their gloss on it below.

to say that he did so.⁷ We must leave it open that were he with us today, something between then and now might have changed his mind.⁸

Can the paratactic account do this? If it respected the tense-sequencing rule, the report would come out, presumably, as

(7) Galileo said that. The Earth moved.

It may be objected that the Italian sentence Galileo uttered was in the present tense, hence it and the second sentence in (5) differ in meaning and, if so, the latter, as uttered by the reporter, cannot samesay Galileo's utterance. But, as already noted, two sentences need not be synonymous for the utterances made using them to samesay each other. The trouble with (5) lies elsewhere.

If we make the paratactic reformulation of the report respect the tense-sequencing rule, as in (7), it is hard to accommodate the demonstrative aspect of the account. Just what is the referent of 'that' in (7)? There is nothing in the offing but the second sentence. Of course, he need not—would not—have uttered that. Nor, as noted earlier, need he have uttered a sentence synonymous with it. But the paratactic account requires that he uttered something that samesays an utterance of that sentence in my mouth, and it is hard to see what that could have been. Had he uttered the demonstrated sentence of (7), he would have said that the Earth had moved at some time before he spoke. What he uttered was (we are supposing), Italian for 'The Earth moves' (understood as a report on the present scene). But, as we have seen, taking the demonstrative to refer to that sentence represents him as having said what I would be saying in uttering that sentence. As Davidson says in dismissing Fregean approaches that posit a difference of sense in direct and in indirect contexts for the same expression, that it is "plainly incredible that the words 'The earth moves', uttered after the words 'Galileo said that', [should] mean anything different, or refer to anything else, than is their wont when they come in other environments" (1968: 144). Yet, surely, if I uttered the sentence in the second sentence of (4) by itself, I would not be saying something quite different from what Galileo can be supposed to

⁷ If I hear someone utter 'The Earth moves', I do interpret him, other things being equal, as saying that it has been, and would continue to be, in motion. But while to use the simple present tense is (often, though not always) to suggest that the state in question is continuous, it is not to assert this, as is shown by the ease with which the suggestion may be cancelled. ('The Earth moves but may stop doing so if ...') Conversely, using the continuous present suggests, but does not entail, that the state is a merely temporary one. ('The Earth is moving and will continue to do so.') And languages that make no distinction between the simple present and the continuous present (or past), such as German and Hungarian, still require tense sequencing.

⁸ It is even possible, for all his uttering the sentence in 1633 entails, that even then he did not believe that The Earth would continue to move after his utterance. (See also fns. 11 and 12 below.) Unlikely, of course, and we have good non-semantic reason to interpret him as believing that it would. I am assuming here that (4) is a warranted interpretation of what Galileo uttered. Indirect reports always involve interpretation, and the ways in which that and the attribution of belief based on it proceeds and the pitfalls it involves raise subtle and complicated questions. Some of these are discussed in Biro (1984, 1992). Here what is in question is only whether an otherwise warranted interpretation could have the underlying form the paratactic account says it does.

have said. We would both be saying that the Earth was moving at the time of our utterance.

The argument thus far has been intended to show that the paratactic account cannot be a general account of indirect reports, as it cannot capture those made with a verb in the continuous present. Does it even work for utterances with a verb in the simple present? Can we, by interpreting Galileo's 'Eppur si muove' as being *not* about the current scene, as it was obviously not intended to be, secure the samesaying relation between his utterance and the second sentence of (3)?

We can take Galileo to be saying something about whether the Earth would be moving now, when *we* speak (as well, of course, when he spoke), if we understand the verb in the simple present to be used in the habitual sense, as when we say of someone that he smokes or goes to church. This is the line urged by Lepore and Ludwig (2003), who claim that the acceptability (as they think) of

(8) The Egyptians knew that the Earth is round.

shows that "reports of certain states that continue into the present" are exceptions to the strict tense-sequencing rule (2003: 98).⁹ They suggest that this is so with indirect reports, too. If so, (2) is also acceptable, for the same reason. In such cases, they say, "if we wish the reports to be possibly true, the right account should focus on what the reportee knows, hears, says, and the like." If this is sound advice, as I think it is, following it invites us to respect the tense-sequencing rule, rather than flouting it, as (2) and (3) do. If we take 'is round' in analogues of these to mean what it means in an analogue of (1), (8) is false. The Egyptians knew no such thing. Assuming that we have satisfied ourselves that they had done their work, we are justified in saying that they knew that the Earth *was* round, but *only* that, certainly not that they knew what the shape of the Earth would be in 2019. Of course,

(9) The Egyptians believed that the Earth was, and would continue to be, round.

may well be true (and we may allow that they may have been justified in their belief). And perhaps

(10) The Egyptians believed that the Earth is round.

⁹ Compare Larson and Ludlow, who say that "if one wished to report in English what a speaker of German said in uttering 'Galileo glaubte dass die Erde sich bewegte' it would be very natural to employ 'Galileo believed the Earth moves.'" (1993: 334). They do not even note the change from the past-tense 'bewegte' to the present-tense 'moves' and take the latter to samesay the former. While they do not say so, one can conjecture that the reason for this is the same as the one suggested by Lepore and Ludwig. The latter "suspect that in this case the present tense is used to indicate that the content of the reported state or event is not relativized simply to the time of the reported event or state, but is about a state that would extend from that past time into some indefinite future time that at least includes the time of utterance" (98). However, Lepore and Ludwig also note that such an exception is possible only if the main verb is factive. They give as an example of where it is not 'I thought that the Earth is round.' If so, 'The Egyptians believed that the Earth is round' should be ruled out, as well, as should Larson and Ludlow's translation of the German. (Perhaps it is the fact that one is reporting on oneself that makes the example Lepore and Ludwig give unacceptable.)

can be interpreted to mean what (9) does. However, to do so we need more to go on than the Egyptians' uttering

(11) The Earth is round.

Their doing so falls far short of being evidence for that. The fact that the past tense in the main clause of (9) requires the subjunctive in the second conjunct of its embedded clause is an indication of this.

In the same way, we should not say of Galileo, great scientist that he was, that he knew that the Earth moves (habitual) now, only that he knew that the Earth moved (habitual) then. Even if he believed that the Earth would continue to do so, he would not have claimed to know—that is, to be certain—that it would. Neither Galileo nor the Egyptians claimed to be soothsayers, and they should not be represented as such. But that is what we are doing with (2) and (8). Thus the fact that 'moves' in (2) *permits* the habit to be a continuing one accommodates the fact that Galileo presumably intended to express by it something to the effect that he believed that, in the nature of things, the Earth was, and always would be, in motion. But even the nature of things can change, and we should not report Galileo as asserting the contrary, even if we are convinced, and no doubt rightly, that he believed that it could not. The information on which that conviction is based is not semantic, and the machinery of indirect discourse should operate in the same way whether the reporter has such information or not. In particular, it should treat cases in which it is plausible to interpret the verb in the target utterance as habitual and cases where it is clearly not.

Compare these three reports:

(12) I had a call from our friend. He said that he was in Paris.

(13) I had a call from our friend. He said that he is in Paris.

(14) I just had a call from our friend. He said that he is in Paris.

Assume that what the friend uttered was 'I am in Paris.' The difference between (12) and (13), on the one hand, and (14) on the other, is that the first two leave unspecified how long before the report the friend spoke, whereas the third tells us that it was very recently. Suppose we are reporting on yesterday's call. (12) would be clearly true, but (13) could not be. It says, falsely, that the friend said that he is in Paris today. (It would be true if the friend had said 'I will be in Paris tomorrow.') Unless the friend added to 'I am in Paris' something like 'and am staying for a day or two,' I am not entitled to report him with (13). (This is even clearer if we imagine him adding 'and will be in London tomorrow'.) In (14), the first sentence indicates the proximity of the report to the utterance reported on, which ensures that, absent funny business, the report is true. But the information that ensures this is contained in the first sentence, which is one uttered by the reporter, not the reportee. There is nothing in what the *latter* uttered that guarantees the truth of (14).

Of course, here, too, I may have information that the friend would be staying on in Paris independently of what he said during the call which would make it reasonable for me to utter (13). But that does not make it the correct report of what the friend said.

The reason why (14)'s first sentence is naturally followed by one with a present-tense verb is not just that it is unlikely that he would have left Paris in the short interval between his utterance and the reporter's. Even when that interval is long enough, and we know that it is, it can be natural to report in the present

tense. I receive a letter from our friend that begins ‘I am in Paris,’ and I say to you ‘Our friend says (that) he is in Paris.’ We both know that he may well have moved on since he wrote the letter, but the tense of the verbs reflects our understanding that it refers to the time of writing not the time of reading. In saying that our friend says that he is in Paris, I am not reporting in the sense in which I am with (12) but am merely repeating his utterance (with the pronoun changed, of course). That the present-tense verb refers to the time of my utterance is conveyed by the first sentence of (14). The present-tense verb in the second sentence does not by itself refer to any determinate time. By contrast, the past-tense verb in the second sentence of (12) tells us that the report (if not necessarily the call) is subsequent to the present-tense utterance (‘I am in Paris’) it reports.

The paratactic analysis offers no way to capture these facts. Neither ‘He said that. I am in Paris’ nor ‘He said that. I was in Paris’ say what the second sentence of (12) says. And, as just suggested, the second sentence of (14) is not really an indirect report in the way (12) is but a case of passing on an utterance in itself semantically un-interpreted, as we do in direct quotation, along with a (pragmatic) pointer in the first sentence as to how to interpret it.

If we adopted the paratactic model for reports of what someone knew, as in

(15) The Egyptians knew that. The Earth is round.

we would be, on a natural interpretation, getting them wrong in the same way as we get Galileo wrong with (3). Interpreting the present-tense verb in the second sentence as relative to the speaker’s context guarantees this. The fact that *we* know that the Earth is still round does not entitle us to attribute knowledge to the Egyptians that it would be in 2019. What matters is not whether we think that the state involved in the report is one that has continued to this day but whether we are justified in interpreting the reportee as knowing that it would. However, his uttering something in the present tense falls short as evidence for so interpreting him. Again, I am not saying that we may not have good reason to attribute the beliefs these reports do to Galileo and the Egyptians, respectively. But that we have such reasons, when we do, is not a fact about the semantics of indirect reports. Neither our natural-language reports nor a theory about their underlying semantic structure should suggest otherwise. We should no more accept (2) than its paratactic offspring.

But how else to interpret (8)? Here, again, we face the same dilemma as we did with (3). We are told to interpret the content-sentence relative to the reportee’s context, which means that we cannot take the present-tense verb to be making a claim about the Egyptians’ knowledge of the future habits of the Earth. Yet, as Lepore and Ludwig insist with respect to (3), that is what we would need to do to make (8) and its paratactic version (15) true. At the same time, we are asked to interpret the former’s content clause and the second sentence of the latter as meaning what they would mean in other contexts, including one in which they are uttered by themselves. Not only does Davidson, too, insist on this, as we have seen—we really cannot help doing so. These two injunctions pull in different directions.

Perhaps we can avoid the dilemma if we get our everyday report right, as we would be doing with

(16) The Egyptians knew that the Earth was round.

This has as its paratactic re-formulation, presumably,

(17) The Egyptians knew that. The Earth was round.

Our problem is still with us, though, as it was with (2). The Egyptians would not have used the embedded sentence of (16) to say what (we want to say) they knew, for in their mouth, that sentence would have meant what we can say only by saying ‘The Earth had been round’. Still, it may be said, *we* can use it to do so. But, once again, the sentence being demonstrated is one whose natural interpretation is one relative to the reporter’s context. That, in fact, is essential to the report’s getting it right: the Egyptians’ uttering the demonstrated sentence tells us that they believed that something had been the case and *only* that. The sentence that the Egyptians would have uttered if they wanted to say that they believed that the Earth was round at the time of their uttering is not the second sentence of (17) but (15).

It should be noted that ‘said’ denotes an action, not a state, as do ‘believe,’ ‘know,’ and the like. Lepore and Ludwig treat these as on a par. However, even if we accepted their claims about reports involving the factive states such as knowing, as I have argued we should not, the dilemma the paratactic account of indirect discourse runs into remains, and it can be put in a nutshell. The content-sentences of (2) and (3) and the sentence Galileo uttered mean the same thing, but the utterances made by uttering them do not samesay each other. On the other hand, the content-sentence of (6), which is, as I have urged, the correct natural-language way to report Galileo, is not something (whose Italian translation) Galileo ever uttered. More importantly, had he done so, he would have said something different from what he in fact said. Thus in pointing to it, we would be pointing to the wrong thing. Galileo and I cannot say the same thing by uttering (1) any more than you and I can say the same thing by uttering ‘I am hungry.’¹⁰ But, unlike in the case of pronouns and other indexicals, with tensed verbs we cannot say the same thing with different sentences, either.¹¹ Not only do the content clause of (6) and the second sentence of (3) differ in meaning, the utterances Galileo and I can make if we use them express different propositions. As we have seen, the utterance attributed to him by (2) would have been true if and only if he had said that the Earth was moving in 1633. The report I would make if I used (2) would be true if and only if Galileo had said that the Earth would be moving in 2019.

A last-ditch attempt to save the paratactic account may take the following line. Taking a hint from Lepore and Ludwig, we may argue that (2) is, after all, acceptable as a report of what Galileo said, as the property it has Galileo attributing to the Earth is one it is plausible to think he thought it would continue to possess, hence it is plausible to think that he said it would. If this is so, our account of the semantics of his utterance, if not that of the semantics of his sentence, should be sensitive to this. But this will not do for two reasons. First, it

¹⁰ If not, that is not because of the difference in pronouns. Examples that do not involve such a difference abound: ‘Churchill and I cannot say the same thing with ‘Germany is a menace to civilization,’ nor Babe Ruth and I with ‘The series is fixed’ or Galileo with ‘The Inquisition is powerful.’ ‘He says that he will vote Tory’ and ‘He said that he would vote Tory’ both make sense—but does ‘He said that he will vote Tory’?

¹¹ Arguably, there is a sense of ‘say’ in which ‘I am hungry,’ said by me and ‘You are hungry,’ said by you to me do not really *say* the same thing. But we can allow that there is a sense in which we express the same proposition, which is enough for present purposes.

would make it impossible to interpret someone uttering what Galileo did as having said that the Earth moved at a particular time and at that time only. Second, even if we allowed that this was (2)'s correct, or, at least, default, interpretation in this special class of cases, this would not help us to a general account of indirect discourse, which the paratactic account clearly aspires to be. Suppose Galileo to have uttered 'It is raining' or 'I am hungry.' Would we regard

(18) Galileo said that it is raining.

and

(19) Galileo said that he is hungry.

as acceptable?

The point is even clearer with utterances of sentences with the verb in the continuous (sometimes—unhappily—called progressive) present (see note 6). If, during an earthquake, my friend utters 'The earth is moving' (that is, the earth beneath our feet, not the Earth), it would be bizarre to report him the next day by

(20) My friend said that the earth is moving.¹²

In these examples, tense-sequencing is forced, if we are to avoid reporting the speaker as having said something preposterous. If (18) is not acceptable, neither is its paratactic reformulation,

(21) Galileo said that. It is raining.

What makes the trouble I am alleging for the paratactic account is not the fact that the reference of pronouns or other referring expressions is determined by context, something others have worried about.¹³ We can grant that an account of samesaying may be given that accommodates some kinds of indexicality and context-dependence. The problem is that the kind introduced by tense seems to make it impossible for a reporter to make the same utterance as was made by the reportee. To utter 'The Earth moves' today is not to say the same thing as what Galileo said in uttering that sentence in 1633, even if we interpret 'moves' as a habitual, our having good reason to do so notwithstanding. True—as noted above—an episodic reading is not available (in English) and true, we have good reason to believe that Galileo intended to assert what he took to be a law. Even so, we should not build into our report of what he *said*, as the paratactic account has us do, that it would be a law in 2019 that the Earth moves. Someone else uttering the same sentence may not have the same intention. Surely, though, he would have said the same thing as did Galileo.

Suppose Pliny to have uttered on the 21st of August, 79

(22) Vesuvius will erupt.

The tense-sequencing rule requires us to report him as in

(23) Pliny said that Vesuvius would erupt.

so as to avoid reporting him as saying something about what Vesuvius would be doing at times subsequent to our report. We need to do this to get the truth-

¹² Here 'moving' means something different than it does in Galileo's 'si muove'.

¹³ Notably Blair (who also agrees with Davidson and Higginbotham in accepting (2) as the correct natural-language report) (2009: 33). On some views (e.g., Lepore and Capelen) there is really no such thing as a context-free interpretation of a sentence.

conditions of his utterance right: he said something true as long as Vesuvius erupted at some the time between his utterance and our report, even if it never erupts again. But neither

(24) Pliny said that. Vesuvius will erupt.

nor

(25) Pliny said that. Vesuvius would erupt.

captures this, the first for the reason just seen, the second, because its content-sentence, being a conditional, cries out for completion (“if only...”) and is, without that, ungrammatical.

It may be thought that the whole question of tenses can be finessed, and thus the propositions brought into line, by interpreting the verb in (1) as the habitual, as we do ‘smoke’ in ‘Do you smoke?’ That interpretation is, in fact, correct, but it is of no help in getting (1) to express the same proposition when uttered in 1630 and in 2019, respectively. We should not be understood as reporting Galileo as saying something about the Earth’s habits in 2019, any more that we would want to report someone uttering ‘Walter smokes’ last year as saying something about Walter’s habits today. This is so even if we are justified in believing that he would have been disposed to say then, and would say now, the same thing about the Earth’s habits as he said in 1633.

The requirement that the reporter samesay the speaker is at the heart of Davidson’s account. With the definition of samesaying in hand, he asks, what is needed if it is to be the case for Galileo’s utterance and my report of it to satisfy it? His answer is that, unlike with quotational analyses of indirect discourse, which put the sentence uttered within the scope of ‘said,’ I need to actually say what it says; I need to use it, not merely mention it. Making the content clause an independent sentence accomplishes this: I can say it and say (with the first sentence) that *it* is what Galileo said. Here is what Davidson says: “If I merely *say* that we are samesayers, Galileo and I, I have yet to *make* us so; and how am I to do this? Obviously, by saying what he said; not by using his words (necessarily), but by using words the same in import here and now as his there and then” (1968:141).

In one sense of ‘say,’ of course, requiring the reporter to say (that is, assert) what his subject said would be absurd. Clearly, Davidson is not claiming that a reporter must himself assert what his subject did, that one cannot report without endorsing. Samesaying must be understood as limited to what Austin calls the locutionary act (1962: 94). It is a matter thus not of sameness of illocutionary act but only of sameness of sense and reference, with the latter being crucial. Sameness of illocutionary force is not required, hence my reporting what you asserted does not commit me to asserting what you did. This is evident in ordinary, tense-sequenced reports such as (6). The trouble for the paratactic account is that the problems of tense I have canvassed arise at the locutionary level, specifically with respect to reference. Tensed verbs ineliminably refer to different times—tense, we may say, determines reference. This is why utterances of sentences with a differently tensed verb express different propositions and their utterers say different things.

The underlying problem is that the paratactic account requires the content-sentence to do double duty. It has to be the vehicle both for the reporter's utterance and, albeit at one remove, for the utterance being reported on. No sentence can be both these things at once.¹⁴ For this reason, one cannot really samesay the speaker one is reporting. Nor should one try. In saying what the speaker said, a reporter is not saying the same thing as the speaker did—to say what someone said is not to say it. In one way this is obvious, if saying is understood as a speech act, rather than just the uttering of a meaningful string. In uttering the second sentence in my report, I do not say what I say you said when you uttered it. Suppose I ask you to say what Galileo said. Am I asking you to say what it was that he said or to say it yourself? No doubt, the context will usually disambiguate. On the paratactic analysis, however, it is not clear that you can do the former except by doing the latter.

It is instructive to compare the case of saying, once again, with that of knowing. Setting tense aside for a moment, the same ambiguity is present with the latter. I can know what (=what it is that) you know without knowing what (=that which) you know, just as I can say what (it was that) Galileo said without saying what (=that which) he said (Austin 1946: 299).

I do not intend the analogy to be perfect. One difference is that I cannot say what you said without knowing what you said, as I can know what you know without knowing what you know.¹⁵ What matters, though, is that if I know that which you know, we are, as we may put it, *samknowers*. But with saying, the tensed verbs in the content-sentence of the original utterance and the content-sentence of the report, respectively, stand in the way of this.

The lesson is that the requirement of samesaying for correct indirect reporting is too strong. It asks that the original utterance and the utterance of the content-sentence of the report express the same proposition.¹⁶ By contrast, reports that respect tense sequencing, such as (6), achieve the sameness of purport Davidson rightly seeks and which, ironically, the requirement of samesaying the paratactic analysis imposes frustrates. In a nutshell: I cannot samesay Galileo in the way proposed, no matter how I try to do it. If the paratactic account were right, I could not report what he said. But I can, too, report it, as in (6). And I can do so precisely because, contrary to the claim that is at the heart of the paratactic account, (6) cannot be parsed as two independent sentences. The relation between its main verb and its content clause, made explicit by sequence of tense, is all-important.

This also shows that accepting (2) as the correct natural-language report of (1) is a mistake. That it *is* accepted as such by almost everyone today may herald the imminent demise of the tense-sequencing rule in English. But as long as it

¹⁴ For a discussion of similar problems with so-called mixed quotation, see Washington and Biro 2001.

¹⁵ I could, if you spoke in a tongue unknown to me, by making a *direct* report. And I may do this even if you (appear to) speak in English but I am not sure—for whatever reason—that you are to be interpreted straightforwardly (Biro 1984, Washington and Biro 2001).

¹⁶ Even if, as noted above, it allows for the sentences uttered to differ in meaning and perhaps even in truth condition (Higginbotham 1999: 207, Burge 1986:192).

has the rule, an account of indirect discourse in English should respect it, as the paratactic account does not.¹⁷

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¹⁷ As noted above, not all languages have the kind of tense-sequencing rule English does. It must be decided case by case whether a given language has other resources for capturing the same distinctions or is to be judged as lacking in expressive power.

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